WHAT IS CLAIMED IS:

1. A method for determining communication channel taps, comprising:

initializing the parameters of a channel tap model;

calculating one or more sets of channel taps from the channel tap model;

using the one or more sets of channel taps to estimate one or more symbols in a received data stream;

calculating one or more sets of adaptively updated channel taps from the one or more symbols estimated in the received data stream; and

fitting the one or more sets of adaptively updated channel taps to update the parameters of the channel tap model.

2. The method of claim 1, further comprising obtaining a first set of channel taps from an input data stream containing a training data stream and a locally generated copy of the training data stream; and initializing the parameters of the channel tap model with the first set of channel taps.

3. The method of claim 1, further comprising running an LMS algorithm to calculate the one or more sets of adaptively updated channel taps from the one or more estimated symbols.

4. The method of claim 1, further comprising fitting the one or more sets of adaptively updated channel taps to a channel tap model that is linear in time.

5. The method of claim 4, further comprising using a linear regression to fit the one or more sets of adaptively updated channel taps.

6. The method of claim 1, further comprising:

iteratively determining the parameters of the channel tap model; and

initializing the parameters of the channel tap model used in each iteration with the parameters determined in a previous iteration by fitting the one or more sets of adaptively updated channel taps determined in the previous iteration.

7. The method of claim 6, further comprising using the channel tap model to estimate progressively larger numbers of symbols in subsequent iterations of the method.

8. The method of claim 6, further comprising terminating the iterative method when a predetermined number of iterations have been executed.

9. The method of claim 6, further comprising terminating the iterative method when the number of symbols to estimate is greater than the number of symbols in a data burst.

10. A computer program product, implemented on a machine readable medium, for executing a channel tap tracking method, the computer program product comprising instructions operable to cause a programmable processor to:

initialize the parameters of a channel tap model;

calculate one or more sets of channel taps from the channel tap model;

use the one or more sets of channel taps to estimate one or more symbols in a received data stream;

calculate one or more sets of adaptively updated channel taps from the one or more symbols estimated in the received data stream; and

fit the one or more sets of adaptively updated channel taps to update the parameters of the channel tap model.

11. The computer program product of claim 10, further comprising instructions operable to cause a programmable processor to:

obtain a first set of channel taps using an input data stream containing training data and a locally generated copy of the training data; and

initialize the parameters of the channel tap model with the first set of channel taps.

12. The computer program product of claim 10, further comprising instructions operable to cause a programmable processor to run an LMS algorithm to calculate the one or more sets of adaptively updated channel taps from the one or more estimated symbols.

13. The computer program product of claim 10, further comprising instructions operable to cause a programmable processor to fit the one or more sets of adaptively updated channel taps to a channel tap model that is linear in time.

14. The computer program product of claim 13, further comprising instructions operable to cause a programmable processor to use a linear regression to fit the one or more sets of adaptively updated channel taps.

15. The computer program product of claim 10, further comprising instructions operable to cause a programmable processor to:

iteratively determine the parameters of the channel tap model; and

initialize the parameters of the channel tap model used in each iteration with the parameters determined in a previous iteration by fitting the one or more sets of adaptively updated channel taps determined in the previous iteration.

16. The computer program product of claim 15, further comprising instructions operable to cause a programmable processor to use the channel tap model to estimate progressively larger numbers of symbols in subsequent iterations of the channel tap tracking method.

17. The computer program product of claim 15, further comprising instructions operable to cause a programmable processor to terminate iteration of the channel tap tracking method when a predetermined number of iterations have been executed.

18. The computer program product of claim 15, further comprising instructions operable to cause a programmable processor to terminate executing the channel tap tracking method when the number of symbols to estimate is greater than the number of symbols in a data burst.

19. A receiver, configured to execute a channel tap tracking method, comprising a digital signal processor configured to:

initialize the parameters of a channel tap model;

calculate one or more sets of channel taps from the channel tap model;

use the one or more sets of channel taps to estimate one or more symbols in a received data stream;

calculate one or more sets of adaptively updated channel taps from the one or more symbols estimated in the received data stream; and

fit the one or more sets of adaptively updated channel taps to update the parameters of the channel tap model.

20. The receiver of claim 19, comprising the digital signal processor further configured to:

obtain a first set of channel taps using an input data stream containing training data and a locally generated copy of the training data; and

initialize the parameters of the channel tap model with the first set of channel taps.

21. The receiver of claim 19, comprising the digital signal processor further configured to run an LMS algorithm to calculate the one or more sets of adaptively updated channel taps from the one or more estimated symbols.

22. The receiver of claim 19, comprising the digital signal processor further configured to fit the one or more sets of adaptively updated channel taps to a channel tap model that is linear in time.

23. The receiver of claim 22, comprising the digital signal processor further configured to use a linear regression to fit the one or more sets of adaptively updated channel taps.

24. The receiver of claim 19, comprising the digital signal processor further configured to:

iteratively determine the parameters of the channel tap model; and

initialize the parameters of the channel tap model used in each iteration with the parameters determined in a previous

iteration by fitting the one or more sets of adaptively updated channel taps determined in the previous iteration.

25. The receiver of claim 24, comprising the digital signal processor further configured to use the channel tap model to estimate progressively larger numbers of symbols in subsequent iterations of the channel tap tracking method.

26. The receiver of claim 24, comprising the digital signal processor further configured to terminate executing the channel tap tracking method when a predetermined number of iterations have been executed.

27. The receiver of claim 24, comprising the digital signal processor further configured to terminate executing the channel tap tracking method when the number of symbols to estimate is greater than the number of symbols in a data burst.